My IntGrid function contains constant amoount of integers for the coordinates for upper left corner and lower right corner.

Also it contains a 2D array which size is determined by 4 values from above.

X2 – X1 as width and Y2 – Y1 as height.

As the input number get bigger, the memory taken will be getting bigger according to size of width and height.

The space complexity of this function is O(width * height).

With this 2D array, Upper bound will be n^2 when width = height.

Upper bound O(n^2)

Also the lower bound would be n when width or height = constant value.

Lower bound Ω(n)

Since Upper bound does not equal to Lower bound, it doesn't have a tight bound.